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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/434,124	11/05/1999	EIICHI HOSHINO	0649-0706P-S	3521

7590

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BIRCH STEWART KOLASCH & BIRCH LLP  
P O BOX 747  
FALLS CHURCH, VA 220400747

EXAMINER

TSOY, ELENA

ART UNIT

PAPER NUMBER

1762

13

DATE MAILED: 02/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/434,124

Applicant(s)

HOSHINO ET AL.

Examiner

Elena Tsoy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 December 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 3-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☒ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☒ Interview Summary (PTO-413) Paper No(s). 12.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_. 6) ☐ Other:

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 4, 2002 has been entered.

***Response to Amendment***

2. Amendment filed on December 4, 2002 has been entered. New claims 12-17 have been added. Claims 1, 3-17 are pending in the application.

***Claim Objections***

3. Claim 1 is objected to because of the following informalities: "one surface" should be changed to "one side" for clearer understanding.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 14-17 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession

of the claimed invention. Applicants assert that no new matter has been added with new claims 14-17 since they are supported by specification at page 16, line 20 to page 17, line 5.

However, at page 16, line 20 to page 17, line 5, the specification describes an embodiment wherein an isolating layer is used for encapsulating particles of an active ingredient, said isolating layer preferably comprising a high-molecular polyhydric alcohol. In other words, the isolating layer comprising a high-molecular polyhydric alcohol is **not** the isolating layer of independent Claims 1/11 so that new Claims 14/15 (dependent on Claims 1/11) clearly add new matter since they are not supported by specification as filed. Claims 16/17 as further limiting claims 14/15 also add new matter.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1, 3-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the adhesive composition" in line 11. There is insufficient antecedent basis for this limitation in the claim.

The term "high-molecular" in claims 14-17 is a relative term which renders the claim indefinite. The term "high-molecular" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The specification as filed discloses that the invention relates to high-molecular polyhydric alcohols such as high-molecular polyethylene

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glycol are preferably used (See specification as filed, page 17, lines 3-5). It is not clear from the specification what ranges are intended to be encompassed by this term.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 1, 3-5, 7-11** are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 10179498.

As to claims 1, 11, JP 10179498 discloses an adhesive mold removing cleaning sheet 30 comprising a liquid-permeable supporting sheet 32 (See Figs. 8, 9; Translated text, page 35, [0055]), an active ingredient member 31 comprising a mold removing ingredient, (liquid-permeable) adhesive member 33a similar to 22a, comprising a hydrophilic adhesive (See Figs. 4, 7; Translated text, page 24, [0038]; page 25, [0039]), a liquid-permeable dropping off prevention sheet (an isolating layer) 33 for separating said active ingredient member 31 and said adhesive member 33a, wherein said supporting sheet 32 is made from similar material as said liquid-permeable isolating layer 33 (See Fig. 7; Translated text, page 30, [0048]; page 31, [0050]; page 35, [0055]), and said cleaning sheet on use being stuck onto an object to be cleaned by applying the adhesive member 33a to the object (See Figs. 8, 9; Translated text, page 5, [0001]; page 6, [0004], paragraph 4; page 31, [0050]) page 33, [0053]). The adhesive surface of the mold removing cleaning sheet should contain at least 30 wt % of the hydrophilic adhesive in an

adhesive blend (See Translated text, page 14, [0021]), with a water content 0.1-60 wt % (See Translated text, page 20, [0030]).

JP 10179498 further teaches that the mold removing cleaning sheet can be stuck and deformed into the shape of a joint either using a *hydrophilic adhesive* substantially covering the supporting sheet (See Figs. 1, 3) or using a *water absorptive polymer* in a central part of the supporting sheet and hydrophilic adhesives 22a/33a on the edges of the supporting sheet 22/isolating layer 33 (See Figs. 2, 4, 6, 7, 9). In other words, a *hydrophilic adhesive* is functionally equivalent to a *water absorptive polymer* for deforming the mold removing cleaning sheet to the shape of a joint to be cleaned.

However, JP 10179498 fails to teach that the central part of the cleaning sheet can be deformed to the shape of the joint by applying the hydrophilic adhesive 33a to the central part of the isolating layer 33 in the cleaning sheet instead or in addition to the water absorptive polymer the central part of the isolating layer 33, i.e. using hydrophilic adhesive 33a substantially covering the surface of the isolating layer 33.

It is held that the selection of a known material based on its suitability for its intended use supported a prima facie obviousness determination in *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied an adhesive member (containing the hydrophilic adhesive) over the substantial part of the surface of a liquid-permeable isolating layer in a cleaning sheet of JP 10179498 instead of using a water absorptive polymer in the central part of the cleaning sheet, with the expectation of providing the desired deformation of the cleaning sheet to the shape of the

joint, since JP 10179498 teaches that either the adhesive member (containing the hydrophilic adhesive), or the water absorptive polymer can be used for the same conforming purpose.

It would have also been obvious to one of ordinary skill in the art at the time the invention was made to have applied a hydrophilic adhesive to a central part of an isolating layer in a cleaning sheet of JP 10179498 instead of a water absorptive polymer to deform the central part of the isolating layer since a hydrophilic adhesive is functionally equivalent to a water absorptive polymer for deforming the mold removing cleaning sheet to the shape of a joint to be cleaned, and the selection of any of these known material as deforming means would be within the level of ordinary skill in the art.

As to claim 3, said mold removing ingredient is provided on said supporting sheet 32, said isolating layer 33 is provided on said active ingredient member 31 to cover said active ingredient member 31, and said adhesive is provided on said isolating layer 33 to form said adhesive member 33a. See Figs. 7, 9.

As to claim 4, JP 10179498 further teaches that the liquid-permeable adhesive of the adhesive member 33a can be impregnated with water (See Translated text, page 20, [0030]). In other words it has through-holes. However, JP 10179498 fails to teach that the through-holes are perforated through-holes.

It would have been an obvious matter of design choice to form through-holes of the liquid-permeable adhesive of the active ingredient member 31 of any desirable size, since such a modification would have involved a mere change in the size of a components. In re Rose, 105 USPQ 237 (CCPA 1955).

As to claim 5, JP 10179498 further teaches that the cleaning sheet can be cut to *required length* (See Translated text, page 23, [0034]) so that the adhesive member 33a, which is arranged



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in two (a plurality) adhesive bands arranged in parallel along the edges of the cleaning sheet would be positioned either in length direction, if a sheet is the cleaning sheet is cut long, or in width direction, if the cleaning sheet is cut short.

As to claims 7, said hydrophilic adhesive contains a polymer selected from (i) a polymer having a salt forming group, (ii) a non-ionic water-soluble polymer, (ii) gelatin, (iv) an emulsion polymer, and (v) a cross-linked product of the polymers (i)-(iv). See Translated text, page 8, [00009].

As to claim 8, the polymer having a salt forming group is a water-soluble sodium styrenesulfonate/methacrylic acid copolymer. See Translated text, page 8, [0009]; page 39, compound No. 7.

As to claim 9, the adhesive member is prepared by blending a hydrophilic adhesive, a plasticizer, and a surfactant. See Translated text, page 37, [0057].

As to claim 10, the hydrophilic adhesive in an adhesive blend contains 0.1-30 wt % water (See Translated text, page 20, [0030]).

10. **Claim 6** is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 10179498 in view of Thies et al (US 4,464,317).

JP 10179498, as applied above, further teaches that an adhesive member 11 is a layer provided on the surface of the supporting sheet 12, an active ingredient member is a plurality of particles dispersed in said adhesive member 11. See Fig. 3; Translated text, page 8, [0007, 0008].

JP 10179498 fails to teach that each particle of the plurality of dispersed active ingredient particles is covered by an isolating layer.

Thies et al teach that encapsulation (covering by an isolating layer) of particles of an active agents such as mildew preventing agents (See column 3, lines 8-16) allows to control the release

rate of the active agent upon gradual fragmentation of formed capsules in water containing environment (See column 7, lines 19-34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have covered each particle of a plurality of dispersed particles of a mold removing ingredient in a cleaning sheet of JP 10179498 with an isolating layer thereby separating the mold removing ingredient from the water containing environment with the expectation of providing the desired control release of the mold removing ingredient, as taught by Thies et al.

11. **Claim 12, 13** are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 10179498 in view of JP 09228212.

JP 10179498, as applied above, further teaches that the isolating layer 33 is made from a material similar to a material of supporting layer (See Translated text, page 31, [0050]); and the supporting layer is made from any water permeable material having favorable water permeability such as paper, cloth, etc. (See Translated text, page 25, [0039]).

JP 10179498 fails to teach that the isolating layer 33 is spun lace nonwoven.

JP 09228212 teaches that spun lace nonwoven is an excellent material for cleaning since it has high tensile strength in both the machine and the cross directions and flexibility and is excellent in touch when dry or wet (See Abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used spun lace nonwoven material for making an isolating layer in a cleaning sheet of JP 10179498 with the expectation of providing the desired strength in both the machine and the cross directions and flexibility, as taught by JP 09228212.

12. **Claim 14-17** are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 10179498 in view of JP 56090838.

JP 10179498, as applied above, further teaches that the isolating layer 33 is of *any* water-permeable material having favorable water permeability such as woven cloth (See Translated text, page 25, [0039]).

JP 10179498 fails to teach that the water-permeable material such as woven cloth comprises high-molecular polyhydric alcohol (Claims 14, 15) such as polyethylene glycol (Claims 16, 17).

JP 56090838 teaches that a water-permeable woven fabric (cloth) made from a hydrophobic porous woven fabric by coating the fabric with high-molecular polyethylene glycol (polyhydric alcohol) is suitable for the use as a membrane material for dialysis and many other uses.

It is held that the selection of a known material based on its suitability for its intended use supported a prima facie obviousness determination in *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945). See also *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960) (selection of a known plastic to make a container of a type made of plastics prior to the invention was held to be obvious); *Ryco, Inc. v. Ag-Bag Corp.*, 857 F.2d 1418, 8 USPQ2d 1323 (Fed. Cir. 1988).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a woven fabric (cloth) coated with high-molecular polyethylene glycol (polyhydric alcohol) as an isolating layer in a cleaning sheet of JP 10179498 since JP 56090838

teaches that the coated woven fabric is water-permeable and is suitable for the use as a membrane material.

### *Response to Arguments*

13. Applicants' arguments filed December 4, 2002 have been fully considered but they are not persuasive.

(A) Applicants argue that in contrast to claimed invention, JP '498 does not disclose (even in the drawings) that an isolating layer isolates a mold removing ingredient from an adhesive layer.

The Examiner respectfully disagrees with this argument. JP '498 does disclose an isolating layer that does isolate a mold removing ingredient from an adhesive layer since an adhesive 33a is positioned on one side of the isolating layer 33 and a mold removing ingredient 31 is positioned on the opposite side of the isolating layer 33, as shown even in drawings (See Figs. 7, 9).

(B) Applicants argue that JP '498 fails to disclose the features of newly added claims 12-17; for example, claims 12 and 13 directed to spun lace nonwoven isolating layer, show unexpected results compared to comparative samples as shown in Tables 3 and 4.

The Examiner respectfully disagrees with this argument. Tables 3 and 4 *compare* cleaning sheets having spun lace nonwoven isolating layer with cleaning sheets having **no isolating layer**. In other words, Tables 3 and 4 show benefits of using an isolating layer of *any* material (including spun lace nonwoven) in a cleaning sheet **not** benefits of spun lace nonwoven material per se. Since Tables 3 and 4 do not contain results comparing spun lace nonwoven material versus other materials, applicants fail to disclose unexpected results.

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The Examiner Note: unexpected results of spun lace nonwoven material can be shown only by comparing two sets of cleaning sheets: one set having spun lace nonwoven isolating layer, another set having an isolating layer of any other material, all other things being equal.

*Conclusion*

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elena Tsoy whose telephone number is (703) 605-1171. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on (703) 308-2333. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

*Elena Tsoy*

Elena Tsoy  
Examiner  
Art Unit 1762

January 27, 2003